

DISEASE PREVENTION BY REACTIVATION OF THE THYMUS

ABSTRACT

The present disclosure provides methods for prevention and/or treatment of disease or
5 illness in a patient by stimulating a patient's immune system through reactivation of the thymus.
The patient's thymus is reactivated by interruption or ablation of sex steroid mediated signaling
to the thymus, such as through the administration of LHRH agonists, LHRH antagonists, anti-
LHRH receptor antibodies, anti-LHRH vaccines, anti-androgens, anti-estrogens, selective
estrogen receptor modulators (SERMS), selective androgen receptor modulators (SARMS),
10 aromatase inhibitors, or various combinations thereof. Non-limiting examples of illnesses or
diseases that may be prevented or treated using the methods of the invention are those caused by
viruses, bacteria, fungi, parasites, prions, cancers, allergens, asthma-inducing agents, or "self"
proteins and other antigens which cause autoimmune disease. In addition, optional gene therapy
utilizing hematopoietic stem cells, lymphoid progenitor cells, and/or myeloid progenitor cells
15 may be used in which the cells are administered to a patient in conjunction with treatment to
reactivate the patient's thymus.

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